Western Region Newsletter

JULY 2011

National Weather Service

In This Issue:

Regional Director's Message

It is with sadness that we say goodbye to another one of Western Region's great leaders. Jim Purpura, MIC San Diego, retired on July 2, after 32 years of government service.

Jim's Weather Service career began in Chicago, his hometown. After years as a forecaster he became the first Warning Coordination Meteorologist stationed in Norman, Oklahoma. He became MIC in Corpus Christi, Texas in 2001 before moving to WFO San Diego in 2003 as the MIC.

Over the course of his career he received a Department of Commerce gold medal for his work on hearing impaired warning dissemination, led a service assessment on the Oklahoma Tornadoes in 2003, experienced Hurricane Claudette and was involved in VORTEX 2 in 2009-2010.

Jim used his talents, innovation and extensive experience to lead change at WFO San Diego. He emphasized the significance of low probability but high impact weather events that affect the populated areas of Southern California. Jim engaged in extensive outreach and became well respected by the emergency management, local and state governments as well as weather enthusiasts.

Enjoy your retirement, Jim! You will be missed.

Vickie

National Weather Service Diversity Marketing Team Unveils Diversity Toolbox

Can you diversify your portfolio of knowledge? This month, the National Weather Service Diversity Council unveiled a Diversity Toolbox that collects all resources for the Diversity Management Program and places it in one location on the Office of Equal Opportunity and Diversity Management's webpage. As part of the Diversity Marketing Team, the Diversity Toolbox provides a quick resource for employees wanting to know more about diversity. The toolbox seeks to bring a collection of ideas and resources from across all Regions of the National Weather Service. NWS offices, diversity focal points, and NWS employees can find multimedia and PowerPoint presentations, videos, and other information to glean information to add to their Diversity Programs in their respective offices or enhance themselves and their careers. Cheryl Latif, the EEO Manager at ERH and the head of the Diversity Marketing Team for developing the toolbox, said that the toolbox will be updated monthly and resources from field offices and employees will expand its collection of materials throughout the National Weather Service.

Featured Decision Support

Arizona's Largest Ever Wildfire

The dry conditions that persisted over southern Arizona for the last several months has made the area highly susceptible to wildfires. On May 29, the Wallow Fire began southwest of Alpine, AZ. The fire quickly spread and by June 14 had become the largest wildfire ever in Arizona. In total, it burned 538,000 acres and destroyed 32 homes and 40 other structures.

This fire spanned across the county warning areas of both WFOs Tucson and Flagstaff. WFO Phoenix was also involved in the decision support activities. These offices worked in tandem to cover such a large incident.

Five days prior to the event, the Fire Weather Planning Forecasts mentioned the critical fire conditions expected. During the event, the critical fire danger was highlighted through various coordination calls, Weather Stories, webpage headlines, and on NWSChat in the Southwest Geographic Area Coordination Center (GACC) chat room. Also, Wallow Fire NWSChat room specific for fire support and information was established. The offices also had continuous coordination with the IMETs in the field.

The Arizona Division of Emergency Management requested twice-daily in-person briefings at the state Emergency Operations Center. At times, the audience included several high-level individuals within the state. There were also daily smoke management calls that include the USFS, state health department, state air quality, and several other agencies including WFOs in Arizona and New Mexico.

The fire is now considered 95% contained, but the work doesn't stop there. Burned Area Emergency Response (BAER) Teams have now begun the work of accessing the possibility for debris flows and flash flooding in the burn areas through the wet monsoon months. Offices have developed precipitation scenario studies for state/federal agencies to use in their flood/debris flow models. All three offices will collaborate with key partners on gage placement and development of flood preparedness/ response plans.

Smoke plume on Wallow Fire, June 1 (credit: USFS)

WFO San Diego Participates in the National Hydrologic Warning Council Biennial Conference

The 3-day conference had a broad range of presenters from NOAA and other government agencies, private companies and researchers. Presentations were delivered during several concurrent sessions with around 300 attendees. Among the attendees included Mary Glackin, Deputy Under Secretary for NOAA operations, Vickie Nadolski, Western Region Director, and Marty Ralph, ESRL Physical Science Division Water Cycle Brach Chief. Joe Dandrea, the hydrology focal point at NWS San Diego, volunteered on the first day setting up the registration booth and organizing agenda folders. The second day featured a field trip, which began with a tour and presentation at the NWS forecast office in Rancho Bernardo, then a visit to SonTek, makers of acoustic water flow monitoring systems, and finally a walk along the historic Old Mission Valley Dam, located upstream on the San Diego River. Alex Tardy, Warning Coordination Meteorologist at San Diego, gave a presentation on challenges with predicting extreme precipitation including a recap of the winter precipitation in Southern California. A dinner banquet was held on the last day giving tribute to all the people who developed the ALERT systems and those who volunteer their time to make the NHWC a success.

Field trip group learning about water quality monitoring on the San Diego River.

The City of San Diego Recognized as StormReady® and TsunamiReady™

The City of San Diego became StormReady® and TsunamiReady™ on June 2, 2011. San Diego is the largest community, besides San Francisco City and County, to become TsunamiReady™.

City of San Diego Mayor Jerry Sander (right) and WFO San Diego WCM Alex Tardy at Mission Bay San Diego StormReady® and TsunamiReady™ ceremony.

Philippine Visitors Tour WFO Seattle

The U.S. Forest Service International Program Asia and Pacific Region arranged to have a group of Philippine visitors tour WFO Seattle on June 20. The purpose of their trip was to see how the U.S. implements National Incident Command System (NIMS) and Incident Command System. The WFO tour focused on a general NWS overview, how NWS uses ICS and address NWS early warning systems such as NWR and EAS.

The group of 13 Philippine visitors were escorted by three US Forest Service International Program staff. WCM Ted Buehner and IMET Carl Cerniglia conducted the tour. The guests were high level authorities in fire, law enforcement, health and emergency management.

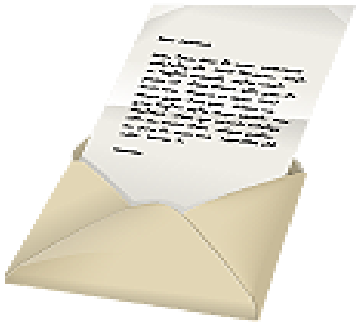
They learned about the NWS mission, NWS operations and programs, saw how the NWR warning alarm and EAS works, the IMET program and use of ICS. The visitors expressed great appreciation for the tour and answering their questions including a summary of U.S. warning response during the recent Japan tsunami that they also experienced in their homeland.

Letter of Thanks to WFO Great Falls from the Montana Director of the American Red Cross

Thank you for putting together the daily state-wide weather briefings. The first two briefings (yesterday and today) have been extremely beneficial to understanding what we may be facing in the next few weeks.

Sincerely,

Kurt Weirich
Director, DR554-11
American Red Cross



Dr. Lubchenco Visits WFO Spokane

Dr. Lubchenco visited WFO Spokane on June 29, 2011 before attending the Western Governors' Association annual meeting in Coeur d'Alene, Idaho. She met with the staff and conducted media interviews. She thanked WFO Spokane for the service they provide to customers and encouraged the staff to keep up the great work. The office briefed Dr. Lubchenco on the unique weather and hydrology challenges of the office, discussed the impact decision support services provided to our EM partners and highlighted some unique outreach efforts, such as partnerships with local agencies to promote environmental awareness in children, our recycle program, and podcasts.

Pictured (l to r): Rocco Pelatti, Elinor Kelch, Anthony Cavallucci, Stephen Bodnar, Katherine Rowden, Mike Henry, Laurie Nisbet, Mike Belarde, Dr. Jane Lubchenco, Rose Tibbitts, Matt Fugazzi, John Livingston, Mark Turner, Todd Carter, Dwight Williams, and NOAA Western Region Climate Director DeWayne Cecil

Letter of Thanks to WFO Hanford from CalEMA

I would like to thank you and your team for the great job you did on the June 10, 2011 briefing of the operational areas in Region V and Stanislaus County, regarding snow melt. Your information was timely, accurate, and official. I rely on your information on a daily basis. Your team always answers my questions, especially vital when I am on the road, heading into a possible disaster. I have never been told to "call back" which is a big plus because usually when I call I am having to size up a situation and answer to an appointed state executive all at the same time.

Thanks Again,

Paul Calkins
Emergency Services Coordinator,
California Emergency Management Agency

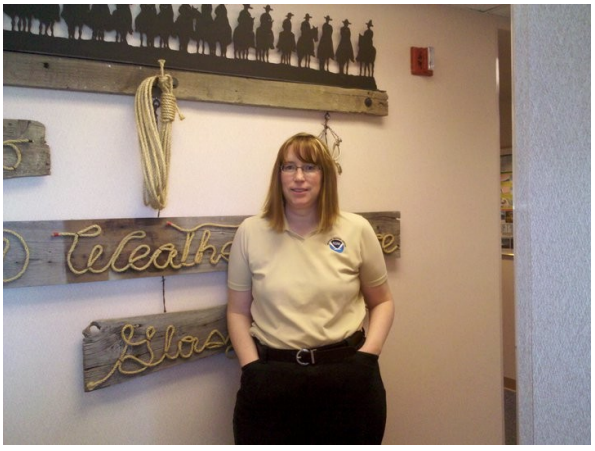
BAUCUS NAMES METEOROLOGIST "MONTANA HERO OF THE DAY"

Senator Highlights Glasgow Meteorologist's Efforts to Keep Her Community Informed

(Washington, D.C.) – Montana's senior U.S. Senator Max Baucus has named Tanja Fransen, a meteorologist for the National Weather Service in Glasgow as his "Montana Hero of the Day" for her extra efforts to help her community throughout the 2011 flood disaster.

Along with serving as the voice of the National Weather Service across northeastern Montana during severe flooding, Tanja also helped fill sandbags to protect folks living along Cherry Creek while she had a broken leg in a cast.

"Tanja went above and beyond the call of duty to make sure residents in eastern Montana were equipped with the information they needed to stay safe throughout the disaster. She was aggressive in getting the latest weather updates together and used her expertise to make a difference during a difficult time," said Baucus. "I'm proud to highlight Tanja as our Montana Hero of the Day, and hope folks join me in recognizing her good work. Now, I hope she will take some time to let that broken leg heal!"



Baucus also recognized the 24-hour-day 23 person crew at the Glasgow National Weather Service for their hard work in getting critical weather alerts to residents throughout the region. Tanja asked to share the spotlight with her team saying she would not have been able to get important weather information to the community without them.

WFO Great Falls in the Montana EOC

During the record flooding that occurred in Montana in June the Montana WFOs had the opportunity to staff the state Emergency Operations Center. At the EOC, the staff provided timely briefings and information to state agencies and FEMA.

WFO Great Falls MIC Michael Mercer and WCM Ben Schott at the Montana State Emergency Operations Center (EOC).

Around the Region

WFO Phoenix Participates in City-Wide Water Drive

On June 16, a team from WFO Phoenix volunteered at the annual City of Phoenix water drive, led by the Salvation Army with several corporate partners. Water collected during the drive is used at hydration stations which are activated during excessive heat warnings, and some of the water will be routed to Arizona's wildfire relief efforts. Doug Green, Paul Iniguez, Mike McLane, and Gary Woodall represented the WFO at the event, and the team took a two-hour stint unloading and stacking bottled water donations. The drive raised over a quarter of a million bottles of water.

(L to R) Mike McLane, Paul Iniguez, Doug Green, and Gary Woodall

Mike McLane and Paul Iniguez stacking bottled water donations

WFO Billings Participates in Billings Clinic Safety and Wellness Fair

On June 1, 2011, WFO Billings employees Brian Tesar and Sean Campbell staffed an informative booth at the Billings Clinic Safety and Wellness Fair. This is an annual event put on by the local Billings Clinic to further promote safety and wellness for their staff. This clinic has always included weather in their safety plans and has been a StormReady Supporter for over 2 years now. Approximately 250 Billings Clinic staff members stopped by the booth through the day to learn about and discuss various aspects of weather safety, including hazards posed by recent flooding. Internet access was also available to provide demonstrations of the NWS webpage.

Repairs to KMUX

Starting on June 2, the NEXRAD at WFO Monterey (KMUX) started having intermittent dynamic pedestal fault alarms. Having an electronics technician recently retire, one tech attending training, and another on annual leave, ESA Wayne Bailey found himself shorthanded and in need of assistance. Working with Wayne and the Radar Operations Center, RMS Rex Bernhart traveled on short notice to assist. Rex and Wayne replaced both the azimuth and elevation drive motors and both rotary couplers. This may seem like an ordinary task; however, both of these heavy motors are located in confined spaces six to twelve feet off the floor of the Radome. KMUX has been online since the corrective maintenance was completed. Congratulations on a job well done to all involved.

Water Leak Fixed at WFO Las Vegas

WFO Las Vegas had a pretty substantial water leak at the anti-siphon valve which needed to be repaired quickly due to landscaping water needs this time of year. FET Mike Sullivan got a quote from a local contractor for $2400 to repair this problem. Mike was dispatched to make the repair because of the high repair cost. Mike spent less than $200 for parts to complete the repair.

UPS Battery Replaced at WFO Portland

Dan Clark and Randy Miller replaced the batteries in the Uninterrupted Power Supply (UPS) at the Portland Weather Service Office. The batteries were prepared and charged the day before which allowed this work to be completed safely in a couple hours. The UPS provides power to the WFO during the transfer of power from different sources. Batteries are monitored and generally replaced every 5 years.

Dan Clark replacing batteries in the UPS at WFO Portland.

Dual Pol Training Guide for WR

The following is meant to provide guidance on training associated with dual-pol installation. Of course, peak leave, shifts, and vacancies will affect the time it takes to get everyone trained. Consider also when your backup office and/or neighbors will get dual-pol. If they're ahead of you in the schedule, then you may want to consider starting training sooner.

**Note that you can substitute the dual-pol WES cases for your regionally required WES case.

3-4 Months Out: Forecasters Start Dual Pol Training

Modules: Meteorologists should begin work on the following modules:

- Overview
- Dual-Pol Radar Products: Correlation Coefficient (CC), Differential Reflectivity (ZDR), Specific Differential Phase (KDP), Hydrometeor Classification (HC), Melting Layer (ML), Dual-Pol QPE Products
- Dual-Pol Radar Applications: Winter Weather (this one could wait until winter training season), Hail, Tornado Debris Signature, Updraft Detection/ZDR Columns, Heavy Rain, Non-Precipitation Echo Detection

Training web modules can be found on the WDTB site.

**Note: The above courses are geared toward anyone in the office that uses radar data, so HMTs and Hydrologists may also take them, but whether or not to make it required is up to the local management. Also, it may be helpful to review these modules again before local severe thunderstorm and/or winter storm seasons.

SOOs and Radar Focal Points should also take these modules:

- Radar Principles: RDA Lessons 1 and 2
- System Operations: RPG Lessons 1, 2 and 3

**Note: Electronics staff may take any of the online modules, but they are generally more geared toward users of the radar data. We'll leave this decision at local office discretion, too.

WES Simulation: The WES Exercise DVD was sent to all offices (CWSU, WFO, RFC, Regions) in January 2011. Once forecasters complete the modules on the WDTB website, they should work through the WES cases called "dual-pol primer".

Completion of the modules and WES should take place by the installation date.

2.5-3 Months Out: Arrange Technician Training

The Dual Pol Program and NWSTC will coordinate with the site and region on training for Electronics staff. *If you have not heard from them by 2.5 months before site installation, contact WRH SSD.*

- One technician per site will be trained at NWSTC in advance of the installation of the Dual Pol modification.
- The training will take place 1.5-2 months before site installation.
- There are no prerequisites to the class.
- Class duration is 5 days.
- This "delta" training will be similar to the ORDA training at NWSTC.
- A second technician will also be trained in the same manner after the first round of training is completed, as with ORDA.

Additional Resources

“Storm of the Week" Webinars

These weekly seminars from WDTB are each about 30 minutes and intended to show use of dual-pol data from recent weather events. Archives of recent webinars are available on the WDTB site. The schedule for additional sessions into the summer/fall is uncertain.

Online Dual-pol Training Aid

An easy to use set of reference guides for each of the products and applications modules. They include the typical values of products for each kind of radar echo, strengths and limitations of each product, steps to the methodologies on how to apply the products to each high impact weather event. This is available for download on the WDTB website.

Dual-Polarization Radar Flipchart

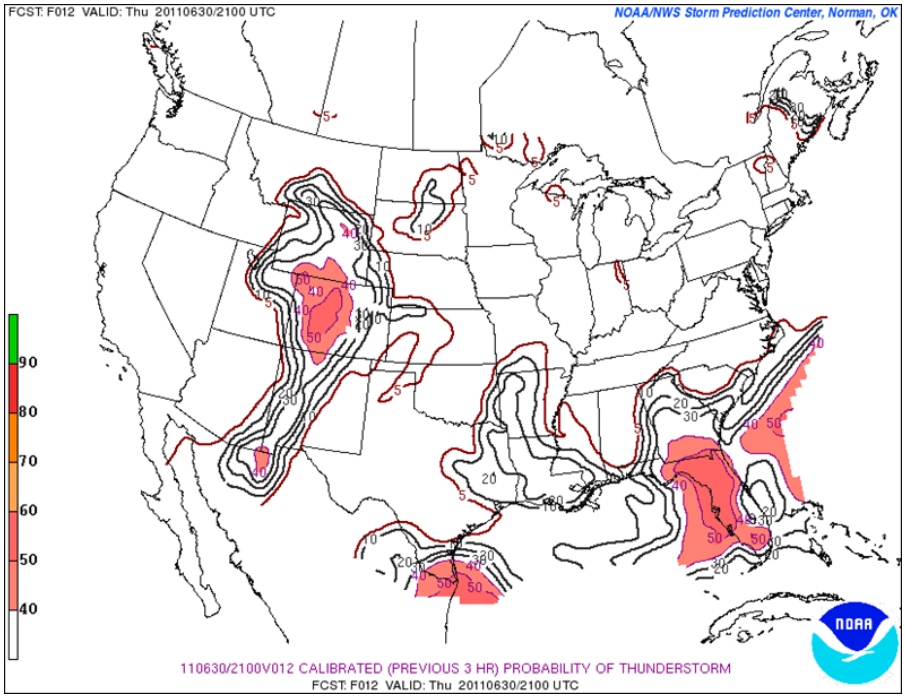
A document designed to help forecasters quickly review representative values of base data for various hydrometeor types. This is available for download on the WDTB website.

Summer Convective Season

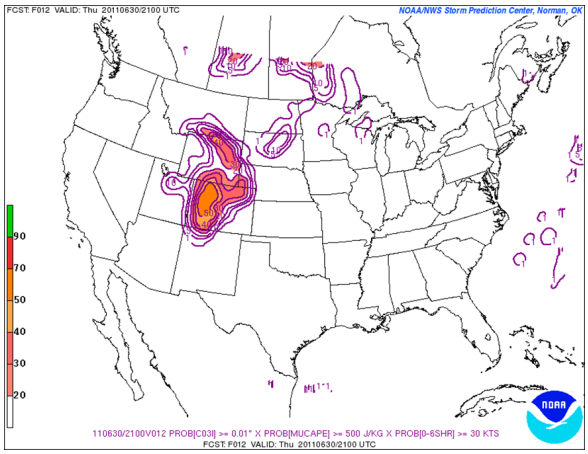
As we get into the summer convective season, we want to remind everyone of the treasure trove of ensemble data that can be found on SPC's website. The probabilistic information derived from the SREF can be extremely useful in keeping situational awareness for thunderstorms and fire weather, and help address forecast confidence. The direct link to the SPC SREF data is: http://www.spc.noaa.gov/exper/sref/

Below are a few parameters that can be helpful to check each shift during the summer. The thresholds noted are rough estimates based on recent experiences.

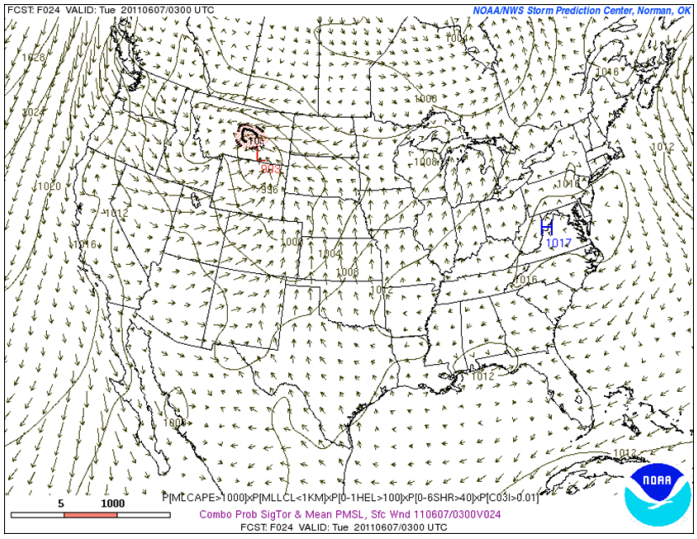
Post-Processed Guidance > [PR] 3hr_Calibrated_Thunderstorm (the calibrations using old SREF forecasts and lightning observations…these values show the 3-hour probability of observing a thunderstorm…values above 30-40% seem to be associated with the more widespread thunderstorm days in the west)



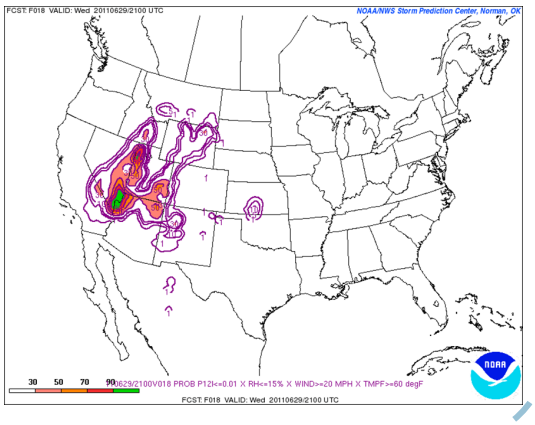
- **Post-Processed Guidance > [PR] 3hr_Dry_Thunderstorm_Potential** (calculated the same as above, but this probability factors in when precip is less than 0.10"…note the probabilities tend to be a lot less and specific thresholds to watch for are uncertain)
- **Severe Weather > [PR] MUCAPE>=500&0-6Shr>=30&C03I>=.01** (a joint probability of instability, shear, and model precip…a good lower bound threshold for organized severe storms… values above 30% seem to correspond to the more widespread severe events in the west)



- **Severe Weather > [PR]:Significant_Tornado_Ingredients** (this chart shows a probability of multiple ingredients for strong tornadoes…the ingredients are listed at the bottom of the plot… while we don't get many tornadoes in the west, there have been a couple recent cases in MT where this product showed ~5-10% probability; the recent historic tornado outbreaks in the east/south have been highlighted by large areas of 50%+)



- **Fire Weather > [PR]:WSPD>=20&RH<=15&Temp>=60&P12I<=0.01** (good situational awareness tool for critical fire weather conditions…this chart shows a joint probability of strong winds, low humidities, warm temps, and no precip…large areas of 70%+ seem to correspond to the bigger critical days…note there is no fuel moisture data incorporated into this)



Update on the Southwest Washington Radar

Langley Hill WSR-88D (KLGX) TPMS (Transition Power Maintenance System) being lifted on to the pad, the three shelters on the site and the antenna in the radome.

Time lapse of the radar construction can be seen at the following:

http://www.centuria.com/nexrad-langley-radar-tower-build/

Gar Nelson Retires after 37 Years

Gar Nelson, Information Technology Officer at WFO Glasgow, retired on July 31 with 37 years of service in the Federal Government, over 25 of which were with the National Weather Service. Gar started his Federal career in October of 1973. The majority of his time in the US Navy was on board a nuclear fast attack submarine as a Sonar Technician. During that time he had many adventures in the western Pacific. After leaving the Navy in 1982, Gar joined NOAA by way of the National Ocean Service. He served two years as a rotating Electronic Technician alternating time between the NOAAS Rainier and Seattle's Pacific Marine Center electronics depot. In 1984 Gar came on board with the National Weather Service at WSO Olympia as an Electronic Technician. On the way to his dream job of being the ITO at WFO Glasgow, Gar has worked as an El Tech at WSO Olympia, WFO Seattle, WFO Nashville and WFO Glasgow. In 2005, Gar transferred to Western Region Headquarters as the AWIPS Regional Maintenance Specialist. With all he learned while working at WRH, he was able to step up to the ITO position at WFO Glasgow in 2007, where he will end his Federal career. Gar's retirement plans are to spend several months volunteering with the Father Ray Foundation in Pattaya, Thailand starting in November, and then finding a place to live where the only frost is on a beverage glass.

Length of Service Awards

Lerman, Kyle	CNRFC Sacramento, CA	Hydromet Analysis and Support Meteorologist	5 Years
Mickelson, Bradley	WFO Glasgow, MT	Meteorologist, General Forecaster	5 Years
Leedy, Steven	WFO Elko, NV	Electronic Systems Analyst	5 Years
Smith, Trent	WFO Missoula, MT	Meteorologist, General Forecaster	10 Years
Kleiner, Linda	WFO Portland, OR	Administrative Support Assistant	20 Years
Felsch, Peter	CWSU Palmdale, CA	MIC	25 Years
Morin, Andrew	CNRFC Sacramento, CA	Senior Hydrologist	30 Years
Greiss, Lawrence	WFO Hanford, CA	Science Operations Officer	40 Years
Gorski, Carl	WRH Salt Lake City, UT	MSD Deputy Division Chief	40 Years

New Hires in Western Region for June

Duaime, Steven	WRH/SOD Salt Lake City, UT	Electronics Technician, RMS
Schaffner, Michael	WRH/HCSD Salt Lake City, UT	Hydrologist Service Program Manager
Krippner, Susan	CWSU Salt Lake City, UT	CWSU Meteorologist

Departures From Western Region For June

Morse, Terry	WFO Hanford, CA	Hydrometeorological Technician	Retirement
Goates, Keith	CWSU Salt Lake City, UT	CWSU Meteorologist	Retirement
Jannuzzi, John	WFO Boise, ID	Meteorologist-in-Charge	Retirement

Please send newsletter submissions to:
matt.ocana@noaa.gov and claudia.bell@noaa.gov
by the **25th** of every month.